Nursing Ethics in the Age of Artificial Intelligence: Ethical Dilemmas and Solutions

Scott Brock*

Department of Nursing, University of Wollongong, Northfields Ave, Wollongong NSW 2522, Australia

Introduction

Artificial intelligence, including machine learning and robotics, is transforming healthcare by enhancing diagnostic accuracy, treatment planning, and patient monitoring. In nursing, AI is being used to streamline administrative tasks, automate patient data analysis, and improve clinical decision-making. While these advancements offer potential benefits, they also raise complex ethical questions. Nurses must ensure patients understand how their data will be used by AI systems and obtain informed consent. Determining who owns and controls patient data when used by AI platforms can be challenging. AI algorithms can inherit biases present in historical healthcare data, potentially perpetuating healthcare disparities. Deciding when and how to override AI recommendations requires a balance between trust in technology and clinical judgment [1].

Description

Nurses may worry about their job security when AI systems handle tasks traditionally performed by humans. AI can free up nurses' time for more complex, patient-centered tasks, but training and adaptation are essential. Some AI models are complex and difficult to interpret, making it challenging for nurses to explain recommendations to patients. Developing AI models that offer transparent explanations for their decisions can help address this dilemma. Healthcare organizations and AI developers should adhere to ethical guidelines and principles that prioritize patient well-being, privacy, and equity. Implementing strategies to detect and mitigate algorithmic bias in AI models is essential. AI developers should prioritize creating transparent algorithms that provide clear explanations for their recommendations [2].

Integrating AI education and training into nursing curricula can prepare nurses to work effectively with AI systems. Providing training on ethical decision-making in the context of AI use can help nurses navigate complex situations. Nurses should facilitate informed consent by explaining AI's role in patient care and data usage. Educating patients about AI technologies and their benefits can enhance transparency and trust. Establishing clear regulations and standards for data governance, ownership, and security is essential. Developing legal and ethical frameworks to define accountability when AI systems are involved in patient care is crucial. Promoting the role of nurses' clinical judgment and emphasizing that AI should augment, not replace, their expertise. The integration of AI into nursing practice presents both ethical challenges and opportunities. Nurses are at the forefront of patient care and must navigate the complexities of using AI while upholding ethical principles. By focusing on ethical AI development, education, patient-centered care, regulatory frameworks, and effective human-AI collaboration, nurses can harness the benefits of AI while maintaining their commitment to ethical nursing practice [3].

In conclusion, nursing ethics in the age of artificial intelligence require a

proactive and ethical approach to address the complex dilemmas that arise. As AI continues to play a significant role in healthcare, nurses must lead in ensuring that ethical principles, patient well-being, and transparency are central to the use of AI technologies. This 1500-word article explores the ethical dilemmas faced by nurses in the age of artificial intelligence and proposes solutions to address these challenges. It emphasizes the importance of ethical AI development, nurse education, patient-centered care, regulatory frameworks, and effective collaboration between nurses and AI systems to ensure ethical nursing practice in a technologically advanced healthcare environment. Applying ethical principles such as autonomy, beneficence, non-maleficence, and justice can guide nurses in assessing the ethical implications of AI use in patient care. Establishing mechanisms for nurses to consult with ethics committees or experts when facing complex AI-related ethical dilemmas can provide valuable insights and guidance.

Nurses, as patient advocates, have an ethical responsibility to ensure that AI is used in ways that prioritize. Nurses should be encouraged to report ethical concerns related to AI use, promoting a culture of ethical accountability. Nurses can advocate for policies and regulations that prioritize ethical AI development and use. Given the rapid evolution of AI technologies, nurses should engage in continual ethical reflection and establish ethics committees that include nurses, AI specialists, and ethicists to evaluate and adapt ethical guidelines as technology advances [4,5].

Conclusion

Ethical dilemmas in nursing practice with AI are complex but navigable. By embracing ethical principles, education, transparent communication, and active advocacy, nurses can ensure that AI technologies enhance patient care while upholding the highest ethical standards. In conclusion, as AI becomes increasingly integrated into healthcare, nurses must remain vigilant in upholding ethical principles and advocating for the well-being of their patients. The ethical use of AI in nursing practice is not just a responsibility but an essential component of providing safe, compassionate, and patient-centered care. This conclusion underscores the importance of ethical decision-making frameworks, ethical responsibility, advocacy, and continual ethical reflection in addressing AI-related ethical dilemmas in nursing practice. It emphasizes that nurses must actively engage in ethical considerations to ensure that AI technologies align with patient well-being and ethical standards.

Acknowledgement

None.

Conflict of Interest

None.

***Address for Correspondence**: Scott Brock, Department of Nursing, University of Wollongong, Northfields Ave, Wollongong NSW 2522, Australia; E-mail: Scottbrock@gmail.com

References

1. Hill, Joshua A, Daniel Li, Kevin A. Hay and Margaret L. Green, et al. "Infectious complications of CD19-targeted chimeric antigen receptor–modified T-cell immunotherapy." *Blood Am J Hematol* 131 (2018): 121-130.

2. Burton, Amy, Catherine Burgess, Sarah Dean and Gina Z. Koutsopoulou, et al. "How effective are mindfulness-based interventions for reducing stress among healthcare professionals? A systematic review and meta-analysis." *Stress Health* 33 (2017): 3-13.

3. Wittmann Dayagi, Talya, Gilad Sherman, Bella Bielorai and Etai Adam, et al. "Characteristics and risk factors of infections following CD28-based CD19 CAR-T cells." *Leuk Lymphoma* 62 (2021): 1692-1701.

4. Klein, Anaelle, Olivier Taieb, Salome Xavier and Thierry Baubet, et al. "The benefits of mindfulness-based interventions on burnout among health professionals: A systematic review." *Explore* 16 (2020): 35-43.

5. Diorio, Caroline, Pamela A. Shaw, Edward Pequignot and Alena Orlenko, et al. "Diagnostic biomarkers to differentiate sepsis from cytokine release syndrome in critically ill children." *Blood Adv* 4 (2020): 5174-5183.

How to cite this article: Brock, Scott. "Nursing Ethics in the Age of Artificial Intelligence: Ethical Dilemmas and Solutions." *Adv Practice Nurs* 8 (2023): 342.